

ABSTRACT OF THE DISCLOSURE

A drive assembly for a printer includes an endless loop drive path and guide structure that allows a printhead to operate in either reciprocal or endless loop modes in which the printhead traverses both a linear and an arcuate portion of the drive path. This provides a printer architecture in which a printhead may be endlessly driven at a constant speed in one direction to provide multiple print swaths separated spatially. This eliminates the need for deceleration/acceleration changes required in reciprocal printer architectures and is capable of increased throughput by defining arcuate turnaround zones that can be traversed by the printhead faster than the time it takes to slow, stop and reverse a conventional reciprocal printhead assembly. This robust printer architecture also allows flexibility in use of multiple printheads with simultaneous printing, simultaneous both side printing, and duplex capabilities.